**DEPARTMENT OF TRANSPORTATION**
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

# WELDING INSPECTION REPORT

**Resident Engineer:** Casey, William
**Address:** 333 Burma Road
**City:** Oakland, CA 94607

**Report No:** WIR-028498
**Date Inspected:** 27-Sep-2012

**Project Name:** SAS Superstructure
**Prime Contractor:** American Bridge/Fluor Enterprises, a JV
**Contractor:** American Bridge/Fluor Enterprises, a JV

**OSM Arrival Time:** 700
**OSM Departure Time:** 1530
**Location:** jobsite

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|---|---|---|---|---|---|---|---|
| **CWI Name:** | Barry Drake | | | **CWI Present:** | ☑ Yes | ☐ No | |
| **Inspected CWI report:** | ☐ Yes | ☑ No | ☐ N/A | **Rod Oven in Use:** | ☑ Yes | ☐ No | ☐ N/A |
| **Electrode to specification:** | ☑ Yes | ☐ No | ☐ N/A | **Weld Procedures Followed:** | ☑ Yes | ☐ No | ☐ N/A |
| **Qualified Welders:** | ☑ Yes | ☐ No | ☐ N/A | **Verified Joint Fit-up:** | ☑ Yes | ☐ No | ☐ N/A |
| **Approved Drawings:** | ☑ Yes | ☐ No | ☐ N/A | **Approved WPS:** | ☑ Yes | ☐ No | ☐ N/A |
| | | | | **Delayed / Cancelled:** | ☐ Yes | ☑ No | ☐ N/A |

**Bridge No:** 34-0006
**Component:** OBG

**Summary of Items Observed:**

Quality Assurance inspector (QA) Matthew Daggett was at the American Bridge/Fluor (ABF) job site at the San Francisco/Oakland Bay Bridge in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

This QAI observed the welder Gue Wu Chan performing first time weld repairs at the following location:

12W-PP115-BW-2

Prior to welding Quality Control Technician Barry Drake performed Visual and Magnetic Particle Testing on the above excavations. This Quality Assurance Inspector verified the results of the test by doing duplicate testing to the excavations. No indications were noted.

The welder spent part of the shift depositing the root passes and fill passes with approximately 100% being completed at the end of the shift. QC inspector Drake was noted to be present in order to monitor the progress and ensure the welding was within the established Welding Procedure Specification (WPS) noted as ABF-WPS-D15-1001 Rev 0 and supporting Procedure Qualification Records (PQR). Prior to and during the welding at this location the QC inspector observed the preheat temperature using a Raytek non-contact Thermometer, was sufficient and compliant to the above-mentioned WPS. Using a Tempil Stick, (temperature indicating crayon) the pre-heat was then verified by this QA inspector to be greater than 150F. Using a Fluke brand Tong style meter, the parameters were verified to be 130 amps.

This QAI observed the welder Gue Wu Chan performing first time weld repairs at the following location:

12W-PP117-BW-2

Prior to welding Quality Control Technician Barry Drake performed Visual and Magnetic Particle Testing on the above excavations. This Quality Assurance Inspector verified the results of the test by doing duplicate testing to the excavations. No indications were noted.

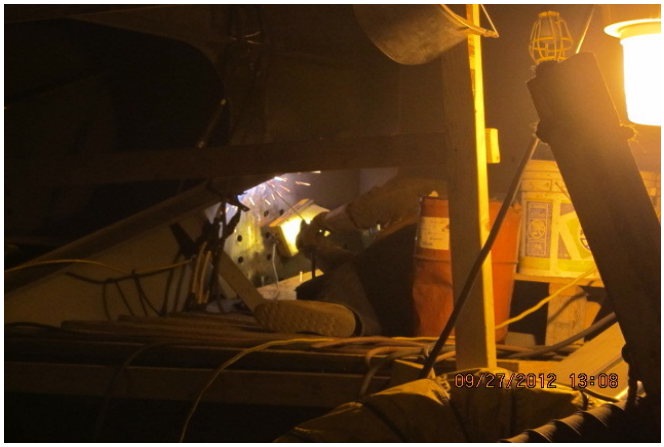
The welder spent part of the shift depositing the root passes and fill passes with approximately 100% being completed at the end of the shift. QC inspector Drake was noted to be present in order to monitor the progress and ensure the welding was within the established Welding Procedure Specification (WPS) noted as ABF-WPS-D15-1001 Rev 0 and supporting Procedure Qualification Records (PQR). Prior to and during the welding at this location the QC inspector observed the preheat temperature using a Raytek non-contact Thermometer, was sufficient and compliant to the above-mentioned WPS. Using a Tempil Stick, (temperature indicating crayon) the pre-heat was then verified by this QA inspector to be greater than 150F. Using a Fluke brand Tong style meter, the parameters were verified to be 122 amps.

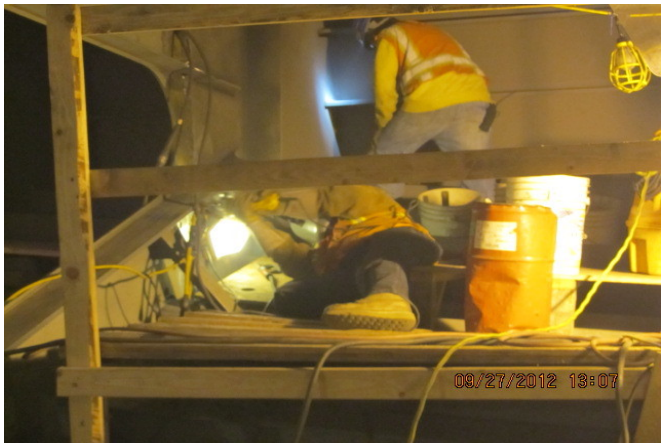
This QAI observed the welder Jin Pei Wang performing first time weld repairs at the following location:

12W-PP115.5-PS-1

Prior to welding Quality Control Technician Barry Drake performed Visual and Magnetic Particle Testing on the above repair areas. This Quality Assurance Inspector verified the results of the test by doing duplicate testing to the excavations. No indications were noted.

The welder spent part of the shift depositing the root passes and fill passes with approximately 100% being completed at the end of the shift. QC inspector Drake was noted to be present in order to monitor the progress and ensure the welding was within the established Welding Procedure Specification (WPS) noted as ABF-WPS-D15-1001 Rev 0 and supporting Procedure Qualification Records (PQR). Prior to and during the welding at this location the QC inspector observed the preheat temperature using a Raytek non-contact Thermometer, was sufficient and compliant to the above-mentioned WPS. Using a Tempil Stick, (temperature indicating crayon) the pre-heat was then verified by this QA inspector to be greater than 150F. Using a Fluke brand Tong style meter, the parameters were verified to be 122 amps.




**Summary of Conversations:**

There were general conversations with Quality Control Inspector Barry Drake, at the start of the shift regarding the location of welding, inspection personnel scheduled for this shift. All observations were relayed to Danny Reyes and Bill Levell.

**Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas 916-764-6027, who represents the Office of Structural Materials for your project.

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| **Inspected By:** | Daggett,Matt | Quality Assurance Inspector |
| **Reviewed By:** | Levell,Bill | QA Reviewer |